Final Project Ideas
Computational Urban Science Workshop, IAP 2019

- **Chance Meetings**:
  Using Agent-based Modeling, calculate the probability that you will bump into a friend during class change.

- **Greenspace Primer**:
  Create an algorithm that helps a community generate landscape and activities for a new public park

- **Semi-automated Site Planning**:
  Work with Spacemaker AI to leverage or build upon their existing tools for generating developments on site parcels

- **Roomie Rents**:
  Define at least two different functions that "fairly" distribute the rent that N roommates should each pay to share an apartment. You algorithm should account for the shape and size of the rooms of the apartment (i.e. use polygons!), and the personal values and preferences of each roommate. Your function could calculate the solution for randomly generated apartment configurations.

- **Synthetic MIT**:
  Model and simulate the movements of students, staff, and faculty during a typical day at MIT (don't forget to take into account three dimensionality of campus!)

- Something Else? A variant or combination of something above?